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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,082	06/24/2004	Shuichi Kitamura	542-012.010	5847

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EXAMINER	
BERNSHTEYN, MICHAEL	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
09/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,082	KITAMURA ET AL.	
	Examiner	Art Unit	
	MICHAEL M. BERNSHTEYN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,7,9,10 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,7,9,10 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action follows a response filed on April 27, 2009. No claims have been amended, added or cancelled.

2. Claims 3, 7, 9, 10, and 17 are pending.

Claim Rejections - 35 USC § 103

3. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.

4. Claims 3, 7, 9, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiguchi et al. (JP 09-324096) in view of Nishiguchi et al. (JP 10-060207) and Hirata et al. (JP 2001-316491), for the rationale recited in paragraph 7 of Office Action dated on January 23, 2009, and comments below.

Response to Arguments

5. Applicant's arguments filed on April 27, 2009 have been fully considered but they are not persuasive.

6. It appears that the focal Applicants argument resides in the contention that the cited references fail to disclose or suggest all the limitations of claim 3. The physical properties of the film described by Nishiguchi'096 are distinct from the physical properties of the present invention, as recited in claim 3. Furthermore, the plasticizer of the present invention is distinct from the plasticizer described in Nishiguchi'096. In

addition, the polyvinyl alcohol (PVA) film discussed in Hirata is used as a polarizing film, and is distinct from the water-soluble film recited in claim 3 (page 2, 2nd paragraph).

7. In response to Applicants arguments it is noted the following (see previous Office Action dated on January 23, 2009).

With regard to the physical properties of the film (e.g., a ratio of storage modulus and a glass temperature) instantly claimed in claim 3, the combined teaching of Nlshiguchi'096, Nishiguchi'207 and Hirata is silent about it. However, in view of substantially identical polyvinyl alcohol composition between Nlshiguchi'096, Nishiguchi'207 and Hirata and instant claim 3 (substantially identical polymerized monomers, plasticizer and its amount, degrees of hydrolysis and the difference in degree of hydrolysis within the claimed ranges, substantially identical method of the preparation of the final composition), it is the examiner position that Nishiguchi'096, Nishiguchi'207 and Hirata's polyvinyl alcohol composition possesses these properties. Since the USPTO does not have equipment to do the analytical test, the burden is now shifted to the applicant to prove otherwise. ***In re Best*** 195 USPQ 430, (CCPA 1977).

With regard to the limitation of claim 3, Nishiguchi'096 does not disclose that polyvinyl alcohol composition contains 0.1 to 50 parts by weight of trimethylolpropane as plasticizer (C).

With regard to the limitation of claim 3, Hirata discloses a polyvinyl alcohol based film containing a plasticizer such as glycerol, diglycerol, diethylene glycol, triethylene glycol, propylene glycol, trimethylolpropane, etc. These may be used singly or in combination of at least two (page 4, [0026]). The amount of the plasticizer to be mixed

is preferably from 1 to 30 parts by weight per 100 parts by weight of the PVA, which is clearly within the claimed range (page 4, [0027]).

Therefore, all of the above plasticizers are functional equivalents and can be substituted by each other. Thus, Hirata recognizes the equivalency of glycerol, diglycerol or ethylene glycol used by Hishiguchi'096 and trimethylolpropane as a plasticizer for a polyvinyl alcohol resin. In the instant case the substitution of equivalents solvents requires no express motivation, as long as the prior art recognize equivalency, ***In re Fount***, 213 USPQ 532 (CCPA 1982); ***In re Siebentritt***, 152 USPQ 618 (CCPA 1967); *Graver Tank & Mf, q. Co. Inc. V. Linde Air Products Co.* 85 USPQ 328 (USSC 1950), and a person skilled in the art would have found obvious to substitute glycerol, diglycerol or ethylene glycol used by Hishiguchi'096 for trimethylolpropane of Hirata in the adjusted amount based on their recognized equivalency and with the reasonable expectation of success, and thus to arrive at the subject matter of instant claim 3.

In response to Applicants arguments that the polyvinyl alcohol (PVA) film discussed in Hirata is used as a polarizing film, and is distinct from the water-soluble film recited in claim 3 (page 2, 2nd paragraph), it is noted that Nishiguchi'096 clearly discloses a water-soluble film which is excellent in low-temp. solubility, does not exhibit any changes in physical properties with changes in temperature and humidity, etc. (abstract).

8. In response to Applicants arguments that Nishiguchi'096 is very clear in stating that these two kinds of resins are different in molecular structures, one being modified (having an additional anionic group) and one being unmodified, and that the modified

PVA resin (component A) of Nishiguchi'096 is distinct from either of the unmodified PVA resins recited in claim 3 (page 3), it is noted that the originally filed application specifies that the PVA resin (A) used in the present invention can be prepared by a know(n) method without any restriction (page 6, lines 5-14). Thus, the disclosure and the claims, as a part of the disclosure, do not contain any limitations for preventing a usage of Nishiguichi'096 structurally modified PVA resin having an anionic group.

9. In response to Applicants arguments that since the objectives of Hirata and Nishiguichi'096 are so disparate, one of skill in the art would not be motivated to combine the teachings of the references to arrive at the limitations recited in claim 3 (page 4, 1st paragraph), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. *See In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Examiner has to repeat again that, Nishiguchi'096 and Hirata's references are analogous art because they are from the same field of endeavor concerning water-soluble film comprises a polyvinyl alcohol and a plasticizer.

10. In response to Applicants arguments that Hirata recognizes that there are distinctions between diglycerol, ethylene glycol and glycerin and the other plasticizers mentioned, namely trimethylolpropane, and accordingly the plasticizers are not exact equivalents as asserted by the Office (page 4, 1st paragraph), it is noted that Hirata's reference was used only to show the equivalency of glycerol, diglycerol or ethylene

glycol used by Hishiguchi'096 and trimethylolpropane as a plasticizer for a polyvinyl alcohol resin, which does not concern the number of used polyvinyl alcohol resin, their saponification degree, etc.

11. In response to Applicants arguments that the PVA film of Nishiguchi'096 has another structure from the PVA film of the present invention, as recited in claim 3, and the PVA film of Hirata has a saponification degree not less than 97 mole %, because it is requires that the film of Hirata obtain water-resistant property to use as a polarizing film, even the combination of the cited references does not produce all of the limitations recited in claim 3 (page 4, 2nd paragraph), it is noted that Nishiguchi discloses the blend of denaturation PVA, which has an anionic radical, and PVA, which has the saponification degree of the specific range at a fixed rate (page 1, [0009)].

Nishiguchi does not disclose specifically that difference in degree of hydrolysis (saponification) between the component A and the component B should be at least 3% by mole, but he exemplifies (example 1) a film formed from a composition comprising a mixture of 35 parts of a modified PVA having saponification degree of 96.3%, and 65 parts of a modified PVA having saponification degree of 71.1 %, where the difference in degree of hydrolysis between the first PVA and the second PVA is much more than 3%, which is clearly within the claimed range.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

/M. M. B./
Examiner, Art Unit 1796

/David Wu/

Supervisory Patent Examiner, Art Unit 1796